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(54) FLUORESCENT LAMP AND LIGHTING SYSTEM
USING SAME

(57) Abstract:

PURPOSE: To make reaction of mercury with sodium scarcely occur and suppress the decrease of luminous flux in a fluorescent lamp using rare earth-based phosphor coatings.

CONSTITUTION: A coating 12 composed of rare earth-based phosphors is formed in the inside of a bulb 1 which is made of glass and includes 15% or more sodium and mercury and a rare gas are sealed in the inside of the bulb 1. A coating 11 composed of finely granular metal oxides having ultraviolet ray absorptive function is formed between the bulb 1 and the rare earth-based phosphors and the thickness of the finely granular metal oxides coating is set to be 0.2 μ m or more and less than 1.5 μ m as average. Consequently, since the finely granular metal oxides coating absorbs ultraviolet ray and mercury is prevented from reaching the bulb, the reaction between sodium and mercury is suppressed and occurrence of blackening and discoloring of the bulb is prevented even though rare earth-based phosphors are used.

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